

ABSTRACT OF THE DISCLOSURE

A method of and apparatus for synchronous control of a leading element and a follower element in which synchronism is started smoothly and a mechanical shock at the start of synchronism is reduced. When the follower element is started to move to be synchronized with the leading element, motion of the follower element is started before the follower element reaches a start position of the synchronism, and brought into synchronism with the leading element at the start position of synchronism. A positional relationship between the leading element and the follower element in synchronism, and a start position for starting the synchronism of the follower element and the leading element is set. An acceleration control of the follower element is performed between a motion start position preceding the start position of the synchronism and the start position of the synchronism. A position control of the follower element is performed based on position data of the leading element and the set positional relationship after the follower element reaches the start position of the synchronism.